InterWorks case study

InterWorks helps hospitality company analyze team-building events with the Face artificial intelligence API from Microsoft Azure Cognitive Services

Taking a closer look at event performance and quality

KAK, a hospitality company in North Macedonia, wanted more insight into its team-building events and the satisfaction level of attendees.

Analyzing event photos with Microsoft technology

Microsoft partner InterWorks implemented its Event Analyzer, which uses Azure Cognitive Services to recognize the emotions of people in images.

Quicker results and information to steer activity planning

Now, with a single day of reviewing photos, KAK can assess the highlights and lowlights of an event – compared to two weeks using a manual process.

Microsoft
Partner
Network

A Microsoft partner that uses and demonstrates the functions of Azure Cognitive Services

InterWorks is an outsourcing company with offices in North Macedonia, the United States, and the Netherlands. InterWorks has been operating since 2004 and has been a Microsoft partner since 2013. Its portfolio spans projects in telecommunications, retail, hospitality, manufacturing, logistics, and financial services.

InterWorks has a depth of experience working with Azure Cognitive Services in the areas of facial and emotion recognition and sentiment analysis of documents. Azure Cognitive Services is a comprehensive family of AI services and cognitive APIs that help companies build intelligent apps. Its Face service provides algorithms that detect, recognize, and analyze human faces in images. InterWorks' two-week proof of concept, available in the Microsoft Azure Marketplace, takes clients through the capabilities of Azure Cognitive Services and helps them create a smart application that can detect faces, recognize people's emotions, and provide other image analysis.

Going from spotty manual analysis to emotion recognition and data analytics

KAK, based in Skopje, North Macedonia, specializes in hospitality management and has a segment dedicated to organizing events. The company has a reputation for organizing international multi-industry team-building events, as well as wedding expos. After each event, KAK had been emailing feedback forms to attendees, but many either chose not to give feedback or filled out the forms carelessly. And when events involved more than 25 people, tracking and evaluating attendee satisfaction became more challenging.

"We were doing the event analysis manually, which required a lot of time, and the analysis was incomplete," said Petar Mladenov, Event Manager at KAK. "To say it in simple words, it was tiresome, and it didn't provide valuable results."

Working with InterWorks, KAK implemented the Event Analyzer, which uses the Azure Cognitive Services Face API to measure facial expressions and emotions like happiness, surprise, anger, contempt, disgust, fear, and sadness. Event Analyzer stores the data in Azure Cosmos DB as JSON documents and uses Azure Blob storage for log files. To process the incoming requests, Event Analyzer uses Azure serverless architecture with Azure Functions and Azure API Management.

Using photos taken at an event, InterWorks' solution provides a detailed analysis of the attendees and their emotions during particular moments. Data analytics and charts are then produced with familiar Microsoft products, including Excel, PowerPoint, and Power BI. This enables a quick assessment of which event activities were popular and which weren't. Instead of spending two weeks receiving and analyzing feedback forms via email, KAK can get all that in one day out of the pictures from the event.

"Using the Azure Cognitive Services Face API, we created Event Analyzer, a solution that optimizes the work of event managers. Thanks to our partnership with Microsoft, the solution cuts down on the time needed to realize an idea and bring it into being."

- Vlado Mitev, CEO, InterWorks